WHAT IS CLAIMED IS:

- 1 A method of pricing on-line distribution of digital information packages 1.
- comprising determining an on-line distribution net price based on a price of
- bandwidth resources necessary to transfer the digital information package
- between at least two parties and based on an underlying price of the digital
- information package itself.
- The method according to claim 1, wherein the price of bandwidth 2. 1
- resources is proportional to a percentage of bandwith allocated to transfer of
- the digital information, and is indirectly inversely proportional to a duration of
- the transfer.
- A method of creating a bandwidth securitization instrument comprising
- valuing bandwidth allocation as a scarce commodity.
- A method of valuing a price and a convenience premium of bandwidth 1
- securitization instruments by facilitating an electronic market for free trading of
- said bandwidth securitization instruments independently of any particular digital 3
- information packages ultimately transferred using said bandwidth.
- A method of computing a convenience premium, comprising steps of:



- determining a supply of bandwidth resources; 2 determining a plurality of bandwidth securitization instruments which 3 allocate the bandwidth resources; and 4 5 determining an estimated demand at a given moment in time for the bandwidth resources. A method of computing a price for a bandwidth securitization security 6. 1 instrument as a function of its intripsic value relative to a minimum standard 2 bandwidth utilization, comprising steps of: 3 obtaining a minimum standard price; 4 a) 5 b) determining an estimated convenience premium of the bandwidth securitization security instrument with respect to said minimum standard price; determining a probability of failure to effect an exercise of the 7 c) 8 security 9 d) determining an exercise period of the security instrument 10 confesponding to a time during which it may be executed or redeemed; and e) determining a price for the bandwidth securitization security 11
- 1 7. A method of combining into one record, at least two of:

instrument based on said steps a), b), c), and d)--

- 2 a digital watermark key,
- a digital information packet (DIP) header, and

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- a bandwidth securitization instrument (Bandwidth Right); 4 5 wherein the DIP header contains information including content description, content addressing and content pricing; 6 7 wherein a bandwidth securitization instrument may be incorporated by including a serialization identification code which is unique to an individual 8 bandwidth right, where record of \$aid right may exist separately from the record 9 containing the serialization identification code; 10 wherein the bandwidth securitization instrument is a unique security 11 which values the right to use a specific allocation of telecommunications 12 bandwidth for a specific duration, where such right exists for a specified period 13 of time, and where the duration begins at or after the temporal issuance of the 14 security, and the exercise period ends contemporaneously with the termination 15 of the duration period. 16 The method according to claim 7, wherein the bandwidth securitization 8. 1 instrument provides a right to use a given bandwidth allocation for a net 2 3 duration over the exercise period where the net duration may be comprised of smaller sub-durations which are not necessarily temporally contiguous.
- 1 9. A method for optimizing key search operations comprising steps of:
- 2 associating content descriptive information with a key used to watermark
- 3 content for candidate keys;

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comparing the content descriptive information from each candidate key 4 in a key; 5 searching against a suspect copy of a title, and using said comparison 6 7 to eliminate keys which are evaluated as unlikely based on the matching criteria of the content descriptive information; 8 wherein criteria includes at least one of: 9 10 media format; content length; 11 content title 12 content author; and 13 content signal metrics which provide heuristic characterizations of 14 the recorded signal. 15 10. A method for performing multi-party, multi-channel encoding of 1 watermarks comprising generating a master framework key, wherein the 2 master framework key describes packetization and channel allocation of a 3 complete signal. 11. The method according claim 10, further comprising a step of: 1 2 distributing the master key and a channel assignment to each party who needs to watermark a channel described in the master key.

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- 1 12. The method according to claim 11, further comprising a step of limiting
- distribution of the master key only to parties who need to add watermarks to
- 3 the signal.
- 1 13. The method according to claim 12, further comprising a step performed
- 2 at least one stage thereafter of:
- generating a general watermark key, for use with the master key which
- 4 dictates watermarking of packets assigned to a single channel of the master
- 5 key watermarking said parkets with said key.
- 1 14. A method of including a key identifier for a distinct watermark channel in
- 2 the watermark contained in an additional separate and distinct watermark
- 3 channel in the same digital sample stream, which is encoded and decoded with
- 4 its own distinct key.
- 1 15. The method according to claim 14 further comprising a step of:
- 2 including the key identifier of a higher privacy watermark channel in the
- 3 watermark contained in a lower privacy watermark channel for a purpose of
- 4 expediting watermark search operations.

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